

Serial No. 09/987,379  
Amdt. Dated November 15, 2004  
Reply to Office Action of August 18, 2004

Docket No. MRE-0040

### **REMARKS/ARGUMENTS**

Claims 5, 7-21, and 25-30 are pending, of which, claims 25-30 are allowed. By this Amendment, claims 7, 8, 13, 17, 19, 25, 28, and 30 are amended. Support for the claims can be found throughout the specification, including the claims and the drawings originally filed. Reconsideration in view of the above amendments and following remarks is respectfully requested.

The Examiner is thanked for the indication that claims 25-30 are allowed, and that claims 7-10, 13, 14, and 16-19 would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. However, it is respectfully submitted that all pending claims are in condition for allowance for at least the reasons below.

The Office Action rejects claims 5, 12, and 20 under 35 U.S.C. § 103(a) as unpatentable over Weber et al. (hereinafter "Weber"), U.S. Patent No. 5,725,140, in view of Asai et al. (hereinafter "Asai"), U.S. Patent No. 5,294,035. The Office Action rejects claims 5, 11, 12, 15, and 20 under 35 U.S.C. § 103(a) as unpatentable over Hawkswell, U.S. Patent No. 4,687,152, in view of Asai. Because the references, individually or in combination, fail to disclose or suggest all the features of the claims, the rejections are respectfully traversed.

Independent claim 5 recites a feeder for a surface mounting device, including features of, *inter alia*, a main frame; a parts feeding unit, a vinyl separation unit, and a vinyl recovery unit mounted on the main frame; and a drive system comprising a forward and backward rotational force generating device in communication with and configured to drive each of the parts feeding

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unit, the vinyl separation unit, and the vinyl recovery unit. It is respectfully submitted that such features and/or the combination thereof are not disclosed or suggested by the references, individually or in combination.

The Office Action, at page 2, acknowledges that Weber does not disclose a forward and backward rotational force generating device, as recited in claim 5. The Office Action, at page 3, acknowledges that Hawkswell also does not disclose a forward and backward rotational force generating device. The Office Action nevertheless asserts that Asai discloses a forward and backward rotational force-generating device. The Office Action then concludes that it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the tape feeders of Weber or Hawkswell to form a tape feeder including means for rotation forward and backward association thereof. For at least the following reasons, it is respectfully submitted that the Office Action fails to establish a *prima facie* case of obviousness.

As set forth in M.P.E.P § 2143.01, if the Office's proposed modification of references would render the prior art invention being modified unsatisfactory for its intended purpose (*In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)), or would change its principle operation (*In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)), then no motivation exists to combine the references. It is respectfully submitted that combining the references in the manner suggested as the basis for the rejection of the claims under 35 U.S.C. § 103(a), would render the tape feeder of each of Weber and Hawkswell unsatisfactory for its intended purpose and/or

change its principle operation to produce an inoperable result, and thus the requisite motivation to combine the references is lacking.

In more detail, Weber relates to a tape feeder 10 for a surface mount placement system, which is driven by rotation of a ratchet wheel 52 mounted coaxially to a sprocket wheel 50, on an axle 53, and a plurality of linkages and cam interactions. (See Figure 8A of Weber, and col. 4, line 23 – col. 5, line 45). More particularly, a sprocket linkage 54 engages the ratchet wheel 52 to thereby rotate the sprocket wheel 50. A pawl 58 is biased by a spring 59 against the teeth of the ratchet wheel 52 to prevent counter-rotation of the ratchet wheel 52 and the sprocket wheel 50. (Col. 4, lines 34-36). In contrast, Asai relates to a tape feeding apparatus having a ratchet wheel 44 that can be rotated in clockwise and counter-clockwise directions. (See Abstract of Asai; Figure 1; and col. 7, lines 33-55). Accordingly, it is inconceivable that the tape feeder of Weber could be modified by Asai to both permit clockwise and counter-clockwise rotation of the ratchet wheel 52, and prevent counter-rotation of the ratchet wheel 52 by operation of the pawl 58 as disclosed in Weber.

Hawkswell relates to a machine for handling electrical components conveyed on a tape assembly 38, 40, in which a drive wheel 52 “positively” drives a sprocket wheel 46 by a drive belt 48 to feed the tape assembly 38, 40. A ratchet wheel (not shown) rotates with the drive wheel 52 to drive the tape assembly 38, 40. A spring member 56 engages the ratchet wheel to prevent counter-rotation of the ratchet wheel, i.e., in a direction opposite to the “tape feed direction.” (See Hawkswell at col. 4, lines 37-39). A lever 58 having a pawl 54 that engages the sprocket

wheel, moves from an initial position in a first direction to rotate the ratchet wheel (and thereby the drive wheel 52), and in a second direction opposite the first to return to its initial position, without reverse rotation of the ratchet wheel. (Col. 3, line 67 – col. 5, line 15). As discussed above, Asai, in contrast, relates to a tape feeding apparatus having a ratchet wheel 44 that can be rotated in clockwise and counter-clockwise directions. Accordingly, it is inconceivable that the device of Hawkswell could be modified by Asai to both permit clockwise and counter-clockwise rotation of the ratchet wheel, and prevent counter-rotation of the ratchet wheel by operation of the spring member 56 as disclosed in Hawkswell. Therefore, it is respectfully submitted that the Office Action fails to establish a *prima facie* case of obviousness.

The Office Action rejects claim 21 under 35 U.S.C. §103(a) as unpatentable over Weber or Hawkswell, in view of Asai, and further in view of Witte, U.S. Patent No. 6,162,007. However, it is respectfully submitted that Witte fails to cure the aforementioned deficiencies of the applied references.

For at least the above reasons, it is respectfully submitted that independent claim 5 is allowable over the applied combinations of references. Dependent claims 11, 12, 15, 20, and 21, as well as objected to claims 7-10, 13, 14, and 16-19 ultimately depend from claim 5, and thus are allowable for at least the same reasons, as well as the additional patentable features recited therein and the combinations thereof. Withdrawal of the rejections and objections is thus respectfully requested.

Claims 13, 17, 19, 25, 28, and 30 are amended merely for clarification.

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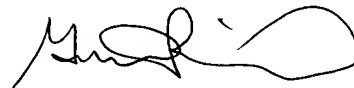
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### **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Garth D. Richmond**, at the telephone number listed below. Favorable consideration and prompt allowance are earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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